

I. THE SYSTEM

Introduction

The NAIC Insurance Regulatory Information System (IRIS) is a collection of analytical solvency tools and databases designed to provide state insurance departments with an integrated approach to screening and analyzing the financial condition of insurers operating within their respective states. IRIS, developed by state insurance regulators participating in NAIC committees, is intended to assist state insurance departments in targeting resources to those insurers in greatest need of regulatory attention. IRIS is not intended to replace each state insurance department's own in-depth solvency monitoring efforts, such as financial analyses or examinations. This IRIS Manual is designed to assist state insurance departments and the public in understanding the IRIS ratios.

One of the most difficult tasks facing state insurance regulators is to make effective use of limited resources. All insurers are required to file financial statements with all of the states in which they are licensed to operate. No state is able to thoroughly review the financial condition of all licensed insurers immediately upon receipt of the financial statements. IRIS helps by providing solvency tools and databases that highlight those insurers that merit the highest priority in the allocation of the state insurance regulators' resources, thus directing those resources to the best possible use.

IRIS Ratio Application

The IRIS Ratio Application generates key financial ratio results based on financial information obtained from insurers' statutory annual financial statements. The ratio results are used in determining the level of regulatory attention required. The NAIC Financial Analysis & Examination Unit of Financial Regulatory Services Department, under the direction of the NAIC Financial Analysis Solvency Tools Working Group, conducts annual reviews of the ratios to ensure that each ratio is current and is relevant to solvency monitoring.

IRIS Ratio Reports are made available to state insurance regulators and interested parties. The reports list insurers alphabetically by type of insurer and include ratio results, usual ranges and identification of unusual values.

A ratio that falls outside the usual range is not necessarily considered adverse. In some years, it may not be unusual for financially stable insurers to have several ratios with results outside the usual range. For example, a rise or decline in the equity markets may result in a significant change in policyholders' surplus. Because surplus is used as the divisor in many of the ratio formulas, certain ratios may fall outside of their usual range.

The ratios and trends are valuable in identifying insurers likely to experience financial difficulties. The ratios are not, in themselves, indicative of adverse financial conditions. The ratios and range comparisons are automatically generated upon data submission, if all data elements are present in the submission. If data elements are submitted with data validation failures or material accounting errors, these failures/errors will be reflected in

the results. If amended data is received after the results have been generated, the ratio results will be recalculated.

Limitations

The IRIS ratios depend on the accuracy and standardization of the annual financial statements and electronic filings of insurers. The tool cannot identify a misstatement of financial condition or a financial statement not prepared in the proper or complete format. Also, there exists the possibility of data-processing errors.

The IRIS ratios have been reasonably effective in distinguishing between troubled and financially stable insurers. As previously stated, the results are not, in themselves, determinative of the financial condition of an insurer. The results are subject to individual insurer circumstances. The following caveats apply:

1. No state can rely on the tools' results as the state's only form of surveillance.
2. Important decisions, such as licensing, should not be based on the tools' results without further analysis or examination of the insurer.
3. Valid interpretation of the tools' results depends, to a considerable extent, on the judgment of financial analysts and examiners. An insurer's ratios may be outside the usual range because of unusual accounting methods, changes in corporate structure, restatements of prior periods, correction of errors in prior periods or other circumstances.
4. The criteria for determining usual range values and the usefulness of the IRIS ratios, although based on the recent experience of insurers becoming insolvent, may not be valid for future experience in different economic periods. For this reason, the components of the ratios are reviewed annually.
5. While the information contained in the IRIS reports is compiled in a manner and from sources believed to be reliable, its accuracy is not guaranteed.

For Life Insurers Only: The IRIS ratios do not include tests of reserve adequacy or strength; however, they do include a test of reserve consistency. The test of consistency may identify insurers that have problems with reserve calculation. However, the determination of reserve adequacy is one of the primary purposes of an on-site examination.

Merged Insurers

The IRIS ratio results of insurers that have entered into mergers during the previous year could be distorted. The distortion occurs if the prior year data used to calculate the ratios is obtained on a single-insurer basis. The ratios are calculated using prior year data obtained on the merged entity, if the merged data is provided by the insurer. Merged prior year data is obtained from insurers on a voluntary basis and is not subject to NAIC data-validation procedures or independent audit requirements.

Branded Risk Classifications

The IRIS Manual has been updated to include the branded risk(s) associated with each ratio. The table below provides definitions of each branded risk classification.

Branded Risk Classifications		
Risk	Symbol	Description
Credit	CR	Amounts actually collected or collectible are less than those contractually due, or payments are not remitted on a timely basis.
Legal	LG	Nonconformance with laws, rules and regulations, prescribed practices, or ethical standards (in any jurisdiction in which the entity operates) will result in a disruption in business and financial loss.
Liquidity	LQ	Inability to meet contractual obligations as they become due because of an inability to liquidate assets and/or obtain adequate funding without incurring unacceptable losses.
Market	MK	Movement in market rates or prices, such as interest rates, foreign exchange rates or equity prices adversely affect the reported and/or market value of the investments.
Operational	OP	The risk of financial loss resulting from inadequate or failed internal processes, personnel and systems, as well as unforeseen external events.
Pricing/ Underwriting	PR/UW	Pricing and underwriting practices are inadequate to provide for risks assumed.
Reputation	RP	Negative publicity, whether true or not, causes a decline in the customer base, costly litigation and/or revenue reductions.
Reserving	RV	Actual losses and/or or other contractual payments reflected in reported reserves or other liabilities will be greater than estimated.
Strategic	ST	Inability to implement an appropriate business plan, to make decisions, to allocate resources or to adapt to changes in the business environment will adversely affect competitive position and financial condition.

II. PROPERTY/CASUALTY RATIOS

This chapter describes the financial ratios of the statistical phase of IRIS and offers suggestions for interpreting ratio results as well as for determining the types of further analysis that need to be performed. The purpose of IRIS is to assist state insurance departments in allocating resources to those insurers in greatest need of regulatory attention.

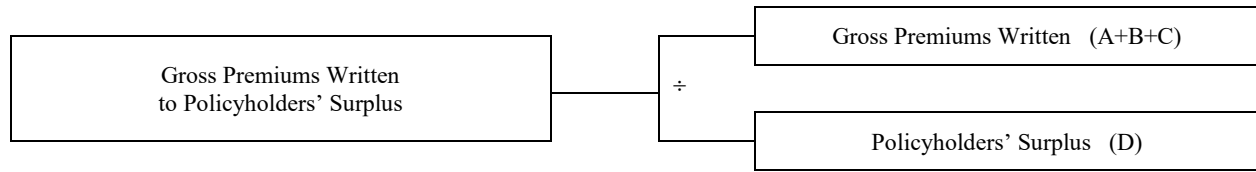
The suggestions for analysis included in the discussion of each financial ratio are intended to assist state regulators in the interpretation of ratio results. The financial analyst or examiner should adjust the depth and direction of their analysis in accordance with their knowledge of the insurer and its particular circumstances.

Analysis should begin with a review of the insurer's ratio results. The financial analyst or examiner should note the ratios reported outside the usual ranges and the amounts by which such values deviate from those ranges.

All ratios are reported as percentages, rounded to the nearest percent. For the Investment Yield ratio, results are rounded to the nearest tenth of one percent.

		Ratio Ranges	
		Unusual Values Equal to or	
Ratio		Over	Under
1.	Gross Premiums Written to Policyholders' Surplus	900	---
2.	Net Premiums Written to Policyholders' Surplus	300	---
3.	Change in Net Premiums Written	33	-33
4.	Surplus Aid to Policyholders' Surplus	15	---
5.	Two-Year Overall Operating Ratio	100	---
6.	Investment Yield	5.5	2.0
7.	Gross Change in Policyholders' Surplus	50	-10
8.	Change in Adjusted Policyholders' Surplus	25	-10
9.	Adjusted Liabilities to Liquid Assets	100	---
10.	Gross Agents' Balances (in collection) to Policyholders' Surplus	40	---
11.	One-Year Reserve Development to Policyholders' Surplus	20	---
12.	Two-Year Reserve Development to Policyholders' Surplus	20	---
13.	Estimated Current Reserve Deficiency to Policyholders' Surplus	25	---

P/C OVERALL RATIO 1 – GROSS PREMIUMS WRITTEN TO POLICYHOLDERS’ SURPLUS



A. Direct Premiums Written	Page 8, Line 35, Column 1	_____
B. Reinsurance Assumed – Affiliates	Page 8, Line 35, Column 2	_____
C. Reinsurance Assumed – Non-Affiliates	Page 8, Line 35, Column 3	_____
D. Policyholders’ Surplus	Page 3, Line 37, Column 1	_____

Result = 100 * (A+B+C) / D _____ %

- If D is zero or negative, result is 999.
- If D is positive and (A+B+C) is negative, result is zero.

Policyholders’ surplus provides a cushion for absorbing losses. This ratio measures the adequacy of the cushion without the effect of premiums ceded to reinsurers. The higher the ratio, the more risk the insurer bears in relation to policyholders’ surplus.

The usual range for the ratio includes results up to 900 percent.

Problems could result from high gross premiums written in relation to policyholders’ surplus. Consider the following:

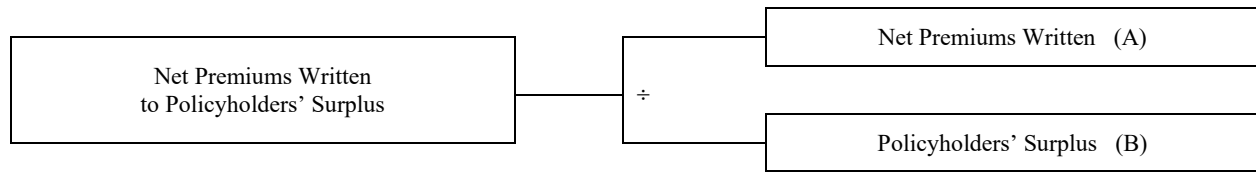
1. An insurer’s Gross Premiums Written to Policyholders’ Surplus ratio reflects its policyholders’ surplus exposure on all business written on a direct or assumed basis, without considering the effect of reinsurance. Therefore, it is important to review the result of this ratio with that of Ratio 2, Net Premiums Written to Policyholders’ Surplus. If the disparity between the two ratios is large, the insurer may be relying heavily on reinsurance. To the extent that the reinsurers are financially sound and make prompt payments to the insurer, this may not be a problem. However, the insurer is liable to the policyholder whether or not the reinsurer makes good on its obligations to the insurer. Under a pooling arrangement, the results of the Gross Premiums Written to Policyholders’ Surplus ratio may be skewed.
2. The distribution of premium between property and casualty lines of business should be reviewed when analyzing this ratio. Insurers with a larger portion of premium from long-tail lines, such as workers’ compensation, should generally maintain a lower Gross Premiums Written to Policyholders’ Surplus ratio, as it is more difficult to accurately estimate potential losses for these lines of business, resulting in a greater variability of losses.

P/C OVERALL RATIO 1 – GROSS PREMIUMS WRITTEN TO POLICYHOLDERS' SURPLUS

3. The percentage of assumed business versus direct business should be reviewed to determine how the insurer generates business. In general, an insurer has less control over business it assumes. However, this does not mean that direct business is preferable to assumed business. Special consideration should be given to assumptions among affiliates that are not part of a pooling arrangement. Assumptions of this type should be investigated to determine the ceding entity's expertise in writing the line of business, its overall underwriting experience, the reason(s) for not retaining the business, and the reason(s) for not utilizing outside reinsurance.
4. Determine whether the insurer's business is profitable and whether profits are stable, increasing, or decreasing. Ratio 5, Two-Year Overall Operating Ratio, provides a measure of profitability for the preceding two years. In general, insurers with stable profits and adequate reinsurance coverage with financially sound reinsurers are better able to sustain a higher Gross Premiums Written to Policyholders' Surplus ratio than insurers with losses, unstable profits, or inadequate reinsurance coverage and/or financially unsound reinsurers.

Branded Risk(s): PR/UW, ST

P/C OVERALL RATIO 2 – NET PREMIUMS WRITTEN TO POLICYHOLDERS’ SURPLUS



A. Net Premiums Written
 B. Policyholders’ Surplus

Page 8, Line 35, Column 6
 Page 3, Line 37, Column 1

Result = 100 * (A / B)

_____ %

- If B is zero or negative, result is 999.
- If B is positive and A is negative, result is zero.

This ratio measures the adequacy of the policyholders’ surplus cushion, net of the effects of premiums ceded to reinsurers. The higher the ratio, the more risk the insurer bears in relation to policyholders’ surplus.

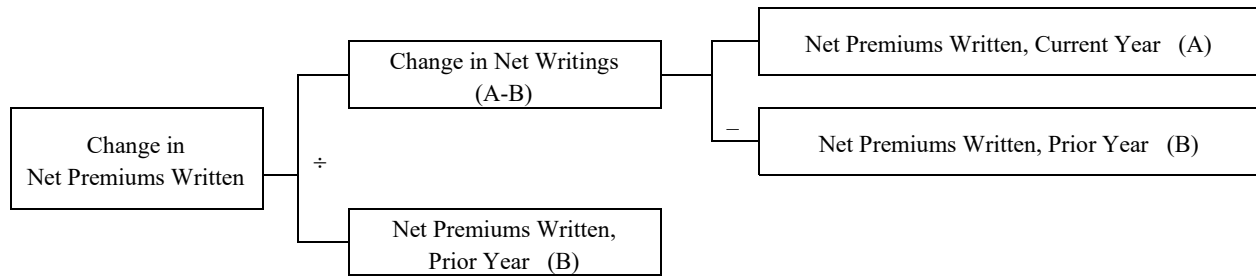
The usual range for the ratio includes results up to 300 percent.

Problems could result from high net premiums written in relation to policyholders’ surplus. The following should be taken into consideration:

1. If the insurer is within a holding company system, consider reviewing this ratio on a consolidated basis. This consolidated approach provides a sense of the degree of group leverage.
2. The distribution of premium between property and liability lines of business should be reviewed when analyzing this ratio. Insurers with a larger portion of premium from long-tail lines, such as workers’ compensation, should generally maintain a lower Net Premiums Written to Policyholders’ Surplus ratio. It is more difficult to accurately estimate potential losses for long-tailed business lines, resulting in greater variability of losses.
3. Determine whether the insurer’s business is profitable and whether profits are stable, increasing, or decreasing. Ratio 5, Two-Year Overall Operating Ratio, provides a measure of profitability for the preceding two years. In general, insurers with stable profits are better able to sustain a higher ratio of net writings to policyholders’ surplus without undue risk than insurers with losses or unstable profits.
4. Determine the level of adequacy of the insurer’s reinsurance protection against large losses. Review the reinsurance contracts that are in place to assess the level of retention.
5. Determine the quality of the reinsurers. For material cessions, review the reinsurers’ financial statements to determine their financial stability. For those situations where collateral must be posted, ensure that the proper level and type of collateral is in place.

Branded Risk(s): PR/UW, ST

P/C OVERALL RATIO 3 – CHANGE IN NET PREMIUMS WRITTEN



A. Net Premiums Written, Current Year

Page 8, Line 35, Column 6

B. Net Premiums Written, Prior Year

PY: Page 8, Line 35, Column 6

Result = 100 * (A-B) / B

_____ %

- If A and B are both zero or negative, result is zero.
- If A is positive and B is zero or negative, result is 999.

Material changes in net premiums written could indicate a lack of stability in the insurer’s operations and/or management. A large increase in premiums may indicate entry into new lines of business or geographic locations. In addition, such an increase in premiums may be a sign that the insurer is attempting to increase cash flow in order to meet current loss payments. A large decrease in premiums may indicate the discontinuance of certain lines of business, scaled back writings due to large losses in certain lines, loss of market share due to competition, or increased use of reinsurance.

The usual range for the ratio includes results from -33 percent to 33 percent.

Familiarity with the insurer’s operations and history is useful in judging the importance of ratio results falling outside the range limits. Such results frequently indicate instability that may include dramatic shifts in product mix, marketing areas, or underwriting policy. When an unstable situation is apparent, further analysis or examination should be directed toward the following:

1. Determine whether the insurer’s assets are properly valued and sufficient liquidity is available to meet cash demands. Consider the results of Ratio 9, Adjusted Liabilities to Liquid Assets, and review Schedules A through E.
2. Review the insurer’s loss reserves and understand the level of adequacy by reviewing the reserve ratios (Ratios 11, 12, and 13) and Schedule P.

P/C OVERALL RATIO 3 – CHANGE IN NET PREMIUMS WRITTEN

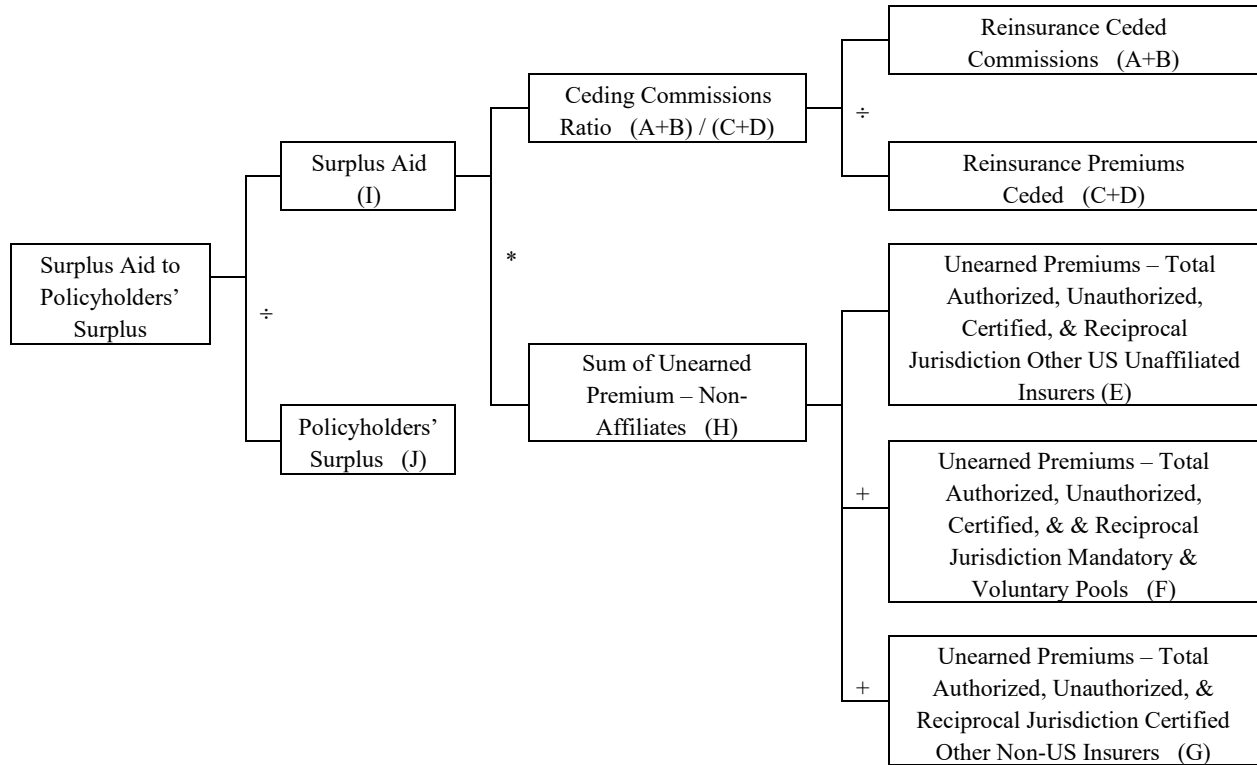
It is important to determine whether a notable increase in writings indicates that the insurer is increasing cash flow to pay current claims. This may be the case if the insurer's recent reserves were inadequate (see the one-year and two-year reserve development, Ratios 11 and 12). An increase in writings, particularly in the liability lines, to pay current claims provides a very short-term solution to underlying problems and quickly increases the risk of insolvency.

An increase in writings does not necessarily indicate difficulties that would threaten an insurer's solvency if they are accompanied by a reasonably low Net Premiums Written to Policyholders' Surplus ratio (Ratio 2), adequate reserving (Ratios 11, 12, and 13), profitable operations (Ratio 5), and a relatively stable product mix.

A decrease in net premiums written with stable gross writings may indicate that an insurer is attempting to increase cash flow related to ceding commissions from non-affiliated reinsurance. A review of Surplus Aid to Policyholders' Surplus ratio (Ratio 4) may help in understanding ratio results below the usual lower range.

Branded Risk(s): PR/UW, ST

P/C OVERALL RATIO 4 – SURPLUS AID TO POLICYHOLDERS’ SURPLUS



A. Reinsurance Ceded Commissions	Page 11, Line 2.3, Column 2	_____
B. Reinsurance Ceded Contingent Commissions	Page 11, Line 2.6, Column 2	_____
C. Reinsurance Premiums Ceded – Affiliates	Page 8, Line 35, Column 4	_____
D. Reinsurance Premiums Ceded – Non-Affiliates	Page 8, Line 35, Column 5	_____
E. Unearned Premiums – Total Authorized, Unauthorized, Certified, & Reciprocal Jurisdiction Other US Unaffiliated Insurers	Page 22, Line (0999999 + 2399999 + 3799999 + 5199999), Column 13, * 1000	_____
F. Unearned Premiums – Total Authorized, Unauthorized, Certified & Reciprocal Jurisdiction Mandatory and Voluntary Pools	Page 22, Line (1099999 + 1199999 + 2499999 + 2599999 + 3899999 + 3999999 + 5299999 + 5399999), Column 13, * 1000	_____
G. Unearned Premiums – Total Authorized, Unauthorized, Certified & Reciprocal Jurisdiction Other Non-US Insurers	Page 22, Line (1299999 + 2699999 + 4099999 + 5499999), Column 13, * 1000	_____
H. Sum of Unearned Premiums (E+F+G)		_____
I. Surplus Aid = [(A+B) / (C+D)] * H		_____
J. Policyholders’ Surplus	Page 3, Line 37, Column 1	_____

Result = 100 * (I / J) _____ %

- If (C+D) or I is zero or negative, result is zero.
- If I is positive and J is zero or negative, result is 999.

The use of surplus aid reinsurance treaties may be an indication that company management believes policyholders’ surplus to be inadequate. Additionally, the continued solvency of insurers with a large portion of policyholders’ surplus resulting from surplus aid may depend on the continuing participation in the treaty with the reinsurer.

P/C OVERALL RATIO 4 – SURPLUS AID TO POLICYHOLDERS’ SURPLUS

The usual range for the ratio includes results less than 15 percent.

The Surplus Aid to Policyholders’ Surplus ratio is important for the following reasons:

1. The existence of significant amounts of surplus aid may be an indication that policyholders’ surplus is inadequate.
2. Surplus aid could improve results on other ratios enough to conceal important areas of concern.

For the reasons previously stated, all insurers with ratios greater than 15 percent should be given careful scrutiny regardless of their scores on other ratios. The following ratio results should be recalculated with policyholders’ surplus adjusted to remove surplus aid:

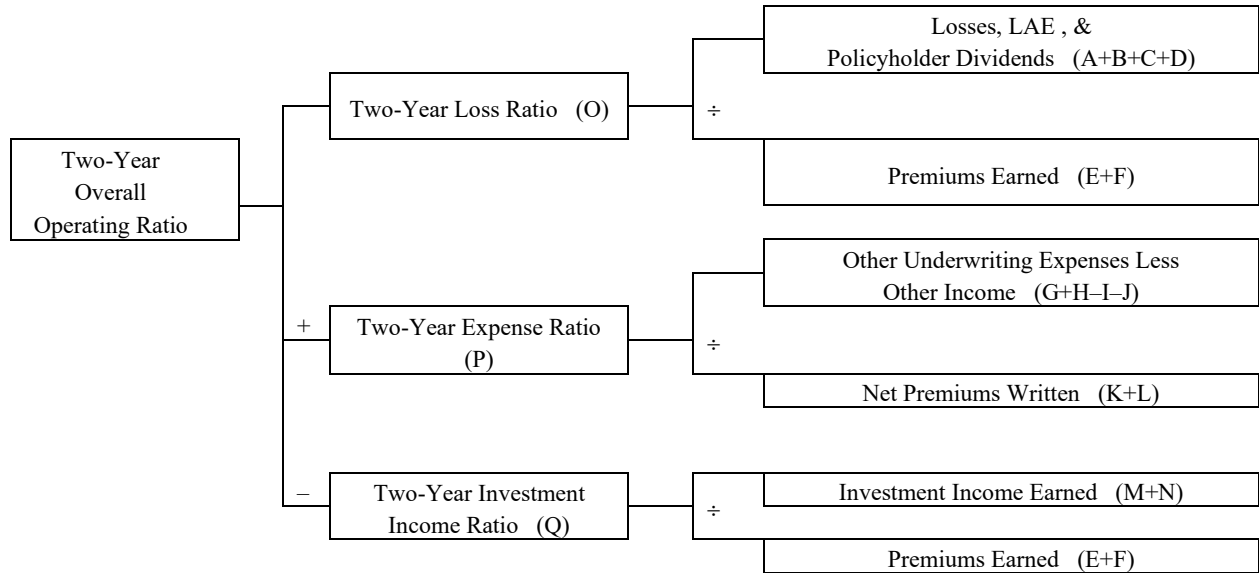
1. Gross and Net Premiums Written to Policyholders’ Surplus (Ratios 1 and 2).
2. Gross Change in Policyholders’ Surplus (Ratio 7). The previous year’s policyholders’ surplus should also be adjusted to remove surplus aid.
3. Gross Agents’ Balances (in collection) to Policyholders’ Surplus (Ratio 10).
4. Estimated Current Reserve Deficiency to Policyholders’ Surplus (Ratio 13).

These adjustments can be made without recalculating the numerator. Divide the result for each ratio by the difference between one and the surplus aid ratio result expressed as a decimal. This recalculation is not recommended if Ratio 4 result is greater than 100 percent.

If an insurer’s IRIS value falls outside the usual range for several of the above ratios, they should be given higher priority. Reinsurance treaties of all insurers with a Surplus Aid to Policyholders’ Surplus ratio of more than 15 percent should be reviewed. This analysis should determine the potential impact on the insurer’s solvency should the treaty be canceled.

Branded Risk(s): PR/UW, ST

P/C PROFITABILITY RATIO 5 – TWO-YEAR OVERALL OPERATING RATIO



A. Losses and LAE Incurred, Current Year	Page 4, Line 2 + 3, Column 1	_____
B. Losses and LAE Incurred, Prior Year	PY: Page 4, Line 2 + 3, Column 1	_____
C. Dividends to Policyholders, Current Year	Page 4, Line 17, Column 1	_____
D. Dividends to Policyholders, Prior Year	PY: Page 4, Line 17, Column 1	_____
E. Premiums Earned, Current Year	Page 4, Line 1, Column 1	_____
F. Premiums Earned, Prior Year	PY: Page 4, Line 1, Column 1	_____
G. Other Underwriting Exp & Write-ins, Current Year	Page 4, Line 4 + 5, Column 1	_____
H. Other Underwriting Exp & Write-ins, Prior Year	PY: Page 4, Line 4 + 5, Column 1	_____
I. Total Other Income, Current Year	Page 4, Line 15, Column 1	_____
J. Total Other Income, Prior Year	PY: Page 4, Line 15, Column 1	_____
K. Net Premiums Written, Current Year	Page 8, Line 35, Column 6	_____
L. Net Premiums Written, Prior Year	PY: Page 8, Line 35, Column 6	_____
M. Net Investment Income Earned, Current Year	Page 4, Line 9, Column 1	_____
N. Net Investment Income Earned, Prior Year	PY: Page 4, Line 9, Column 1	_____
O. Loss Ratio = 100 * [(A+B+C+D) / (E+F)]		_____ %
P. Expense Ratio = 100 * [(G+H-I-J) / (K+L)]		_____ %
Q. Investment Income Ratio = 100 * [(M+N) / (E+F)]		_____ %

Result = (O+P-Q) _____ %

- If (A+B+C+D+G+H-I-J-M-N) is zero or negative, result is zero.
- If (E+F) or (K+L) is zero or negative, result is 999.

The Two-Year Overall Operating Ratio is a measure of the profitability of an insurance company. Ultimately, the profitability of the business is a principal determinant of the insurer’s financial stability and solvency.

P/C PROFITABILITY RATIO 5 – TWO-YEAR OVERALL OPERATING RATIO

The usual range for the ratio includes results less than 100 percent. A Two-Year Overall Operating Ratio below 100 percent indicates an operating profit and a ratio result above 100 percent indicates an operating loss. Analysis of the Two-Year Overall Operating Ratio is helpful in determining the reasons behind the insurer's poor performance, whether it is due to a high loss ratio, a high expense ratio, or a low return on investments. When analyzing the result, consider the result of Ratio 11, One-Year Reserve Development to Policyholders' Surplus, and Ratio 13, Estimated Current Reserve Deficiency to Policyholders' Surplus, because prior year reserve development or current reserve deficiency may understate or overstate the true operating position of an insurer. For an insurer with a result outside the usual range on Ratio 11, the analyst should recalculate this ratio after eliminating the prior year development to obtain a more accurate picture of the insurer's current operating position.

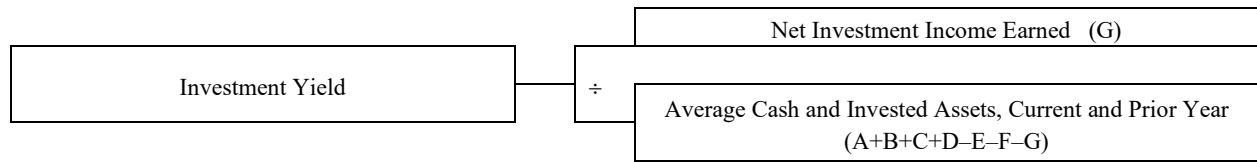
A high loss ratio may be the result of large amounts of losses incurred on poorly developed lines of business and/or reserve strengthening on certain lines of business. Loss adjustment expenses may be high due to inflated claim adjustment fees on adverse business.

A high expense ratio may be due to high commission and brokerage fees as well as excessive salaries and other operating expenses.

The subtraction of the investment income ratio allows insurers a credit for their investment earnings to offset underwriting losses. The investment income ratio should be reviewed to understand the components that impact the Two-Year Overall Operating Ratio.

Branded Risk(s): OP

P/C PROFITABILITY RATIO 6 – INVESTMENT YIELD



A. Total Cash and Invested Assets, Current Year	Page 2, Line 12, Column 3	
B. Total Cash and Invested Assets, Prior Year	PY: Page 2, Line 12, Column 3	
C. Investment Inc. Due & Accrd, Current Year	Page 2, Line 14, Column 3	
D. Investment Inc. Due & Accrd, Prior Year	PY: Page 2, Line 14, Column 3	
E. Borrowed Money, Current Year	Page 3, Line 8, Column 1	
F. Borrowed Money, Prior Year	PY: Page 3, Line 8, Column 1	
G. Net Investment Income Earned	Page 4, Line 9, Column 1	

Result = 200 * [G / (A+B+C+D-E-F-G)] %

- Limit result to a minimum of zero.

The Investment Yield ratio provides the percentage of annual income on an investment portfolio.

The usual range for the ratio includes results greater than 2.0 percent and less than 5.5 percent.

The analyst should review the types of investments reported in the annual financial statement, Schedules A through E, and the yield on each type of investment as reported on the Exhibit of Net Investment Income to determine the cause of a high or low investment yield.

Low yields may be caused by:

1. Speculative Investments

These investments occasionally produce large capital gains over the long run but provide little income in the interim. Analysis should focus on the proper valuation of these investments and the determination of their stability and liquidity.

2. Large Investments in Affiliated Entities Under the Control of the Company

Analysis should focus on the appropriateness of these investments, their value, and their liquidity.

3. Large Investments in Home Office Facilities

Analysis should focus on the ability of the insurer to afford its facilities while maintaining liquidity. Also, review the adequacy of the amount of rent charged to underwriting expenses and credited to investment income.

P/C PROFITABILITY RATIO 6 – INVESTMENT YIELD

4. Considerable Investments in Tax-Exempt Bonds

Analysis should focus on an estimate of the current fair value of these securities, which may be substantially less than the book/adjusted carrying value. If an insurer is currently paying federal income taxes and has large amounts of tax-exempt securities, its after-tax yield could be comparable to that of other insurers with a substantially higher before-tax yield derived from taxable securities. This type of investment philosophy is viewed as conservative.

5. Significant Interest Payments on Borrowed Money

Large borrowings by an insurer may result in significant interest payments, which will reduce the insurer's investment yield. Some reinsurance contracts may also require interest payments, which will also reduce the yield. In either instance, apart from the reduction in investment yield, these situations should be investigated further to determine if they are symptomatic of other problems such as lack of liquidity.

6. Extraordinarily High Investment Expenses

Although an insurer may be investing in assets that would be expected to provide an adequate return, investment expenses and other deductions from investment income may be reducing the net investment yield.

High yields may be caused by:

1. Investments in High-Risk Instruments

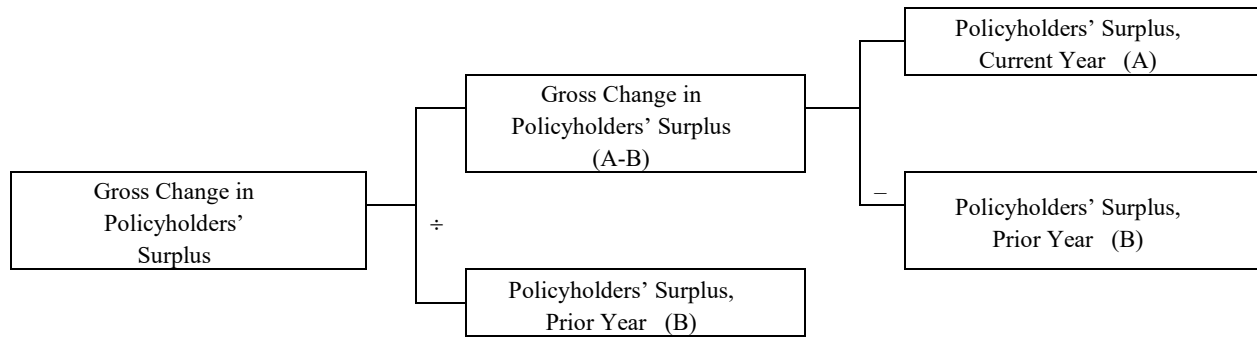
High-risk instruments could excessively leverage surplus and may fall outside statutory limitations.

2. Extraordinary Dividend Payments from Subsidiaries to the Parent

Review dividend laws for the insurer's state of domicile.

Branded Risk(s): LQ, MK, ST

P/C PROFITABILITY RATIO 7 – GROSS CHANGE IN POLICYHOLDERS’ SURPLUS



A. Policyholders’ Surplus, Current Year
 B. Policyholders’ Surplus, Prior Year

Page 3, Line 37, Column 1
 PY: Page 3, Line 37, Column 1

Result = 100 * [(A-B) / B]

- If A is zero or negative, result is -99.
- If A is positive and B is zero or negative, result is 999.

_____ %

The Gross Change in Policyholders’ Surplus ratio is the ultimate measure of improvement or deterioration in the insurer’s financial condition during the year.

The usual range for the ratio includes results less than 50 percent and greater than -10 percent.

The lower range (-10 percent) is set more conservatively since a decrease in policyholders’ surplus is a cause for concern. The upper range (50 percent) is used because a number of insolvent insurers report dramatic increases in policyholders’ surplus prior to insolvency. Large increases in policyholders’ surplus may be an indication of instability and may sometimes be related to the shifting of capital from other companies within a group, significant growth, or mergers and acquisitions.

If the ratio result falls below -10 percent, further analysis should be directed at determining the reasons for the change and whether these factors will be repeated in future years. This analysis compares the changes to policyholders’ surplus for the two years and identifies the major factors affecting increases or decreases in policyholders’ surplus, including but not limited to:

1. Net income (also review Ratio 5, Two-Year Overall Operating Ratio).
2. Unrealized capital gains or losses. Review the Exhibit of Capital Gains (Losses) in the annual financial statement and compare the current components to the prior year-end components to determine which categories of investments are responsible for the changes in unrealized capital gains or losses. Determine whether a change in common stock was caused by decreases in the value of subsidiaries. If so, analyze the subsidiary to determine any solvency concerns.

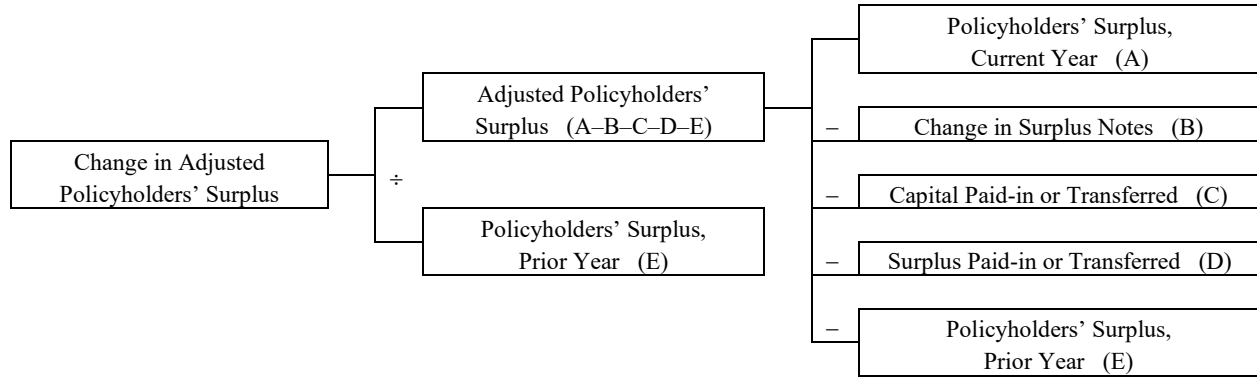
P/C PROFITABILITY RATIO 7 – GROSS CHANGE IN POLICYHOLDERS’ SURPLUS

Review the insurer’s investments and the supporting annual financial statement Schedules A through E. Determine whether changes in unrealized gains or losses were in line with changes experienced by other insurers investing in similar classes of assets during the same time period. If large unrealized losses have occurred, understand the steps the insurer took to protect it against further losses. If large unrealized gains have occurred, determine whether this was attributable to stock market increases, which could create a temporary rise in surplus.

3. To view the collective effects of a change in surplus notes, capital paid-in or transferred, and surplus paid-in or transferred, a review of Ratio 8, Change in Adjusted Policyholders’ Surplus, is suggested.
4. Dividends to stockholders.
5. Changes in nonadmitted assets. Review the Exhibit of Nonadmitted Assets in the annual financial statement.
6. Changes in surplus aid from reinsurance. Review Ratio 4, Surplus Aid to Policyholders’ Surplus.
7. Accounting changes and corrections of errors. Review Notes to Financial Statement #2 to determine the nature of the changes. Determine whether the insurer’s changes are consistent with changes experienced by other insurers with similar lines of business. Understand whether the changes will have a material impact on current year operations and/or future periods.
8. Change in net deferred income tax. Review Notes to Financial Statement #9 to obtain a greater understanding of the sources of the insurer’s book/tax differences and the changes in these items during the current year.
9. Change in ownership or program direction.

Branded Risk(s): OP, ST

P/C PROFITABILITY RATIO 8 – CHANGE IN ADJUSTED POLICYHOLDERS’ SURPLUS



A.	Policyholders’ Surplus, Current Year	Page 3, Line 37, Column 1	_____
B.	Change in Surplus Notes	Page 4, Line 29, Column 1	_____
C.	Capital Paid-in or Transferred	Page 4, Line 32.1 + 32.2 + 32.3, Column 1	_____
D.	Surplus Paid-in or Transferred	Page 4, Line 33.1 + 33.2 + 33.3, Column 1	_____
E.	Policyholders’ Surplus, Prior Year	PY: Page 3, Line 37, Column 1	_____

Result = 100 * [(A-B-C-D-E) / ABS(E)] _____ %

- If A is zero or negative, result is -99.
- If A is positive and E is zero or negative, result is 999.

This ratio measures the improvement or deterioration in the insurer’s financial condition during the year based on operational results. The usual range for the ratio includes results less than 25 percent and greater than -10 percent.

Changes in surplus notes, capital changes, and surplus adjustments are removed from policyholders’ surplus in order to highlight the insurer’s actual operations. In some cases, insurers may use capital contributions as a method of masking changes in surplus directly tied to operational issues. By removing these contributions, a more accurate picture of changes in policyholders’ surplus from operations is obtained.

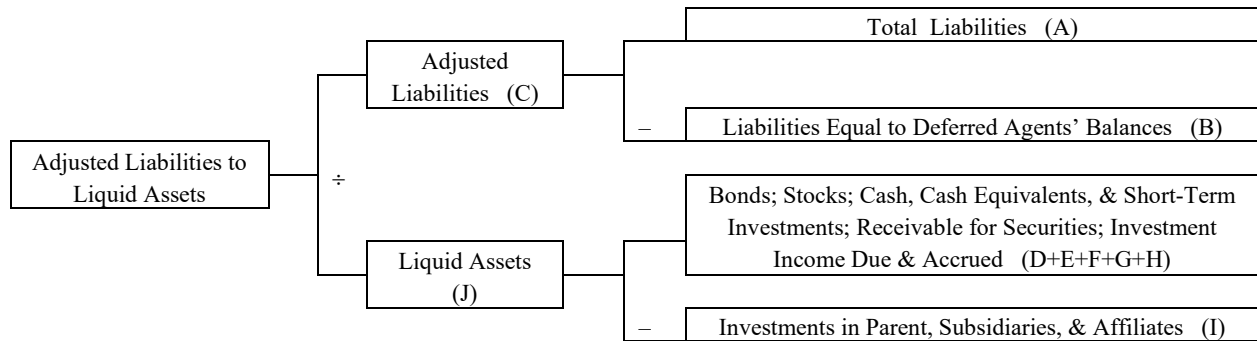
The lower range (-10 percent) is set more conservatively since a decrease in policyholders’ surplus is a cause for concern. The upper range (25 percent) is used because a number of insolvent insurers have dramatic increases in policyholders’ surplus prior to insolvency.

The following factors may contribute to increases or decreases in policyholders’ surplus:

- Net income
- Net unrealized capital gains or losses
- Changes in nonadmitted assets
- Changes in provision for reinsurance
- Cumulative effect of changes in accounting principles
- Dividends to stockholders
- Changes in treasury stock
- Other gains or losses

Branded Risk(s): OP, ST

P/C LIQUIDITY RATIO 9 – ADJUSTED LIABILITIES TO LIQUID ASSETS



A. Total Liabilities	Page 3, Line 28, Column 1	_____
B. Liabilities Equal to Deferred Agents' Balances	Page 2, Line 15.2, Column 3	_____
C. Adjusted Liabilities = (A–B)		_____
D. Bonds	Page 2, Line 1, Column 3	_____
E. Stocks, Preferred & Common	Page 2, Line 2.1 + 2.2, Column 3	_____
F. Cash, Cash Equivalents & Short-Term Investments	Page 2, Line 5, Column 3	_____
G. Receivable for Securities	Page 2, Line 9, Column 3	_____
H. Investment Income Due & Accrued	Page 2, Line 14, Column 3	_____
I. Investments in Parent, Subsidiaries, & Affiliates	Page 17, Line 42 + 43 + 44 + 45, Column 1	_____
J. Liquid Assets = (D+E+F+G+H–I)		_____

Result = 100 * (C / J) _____ %

• If J is zero or negative, result is 999.

The Adjusted Liabilities to Liquid Assets ratio is a measure of the insurer's ability to meet short-term obligations. It also provides a rough indication of the possible implications for policyholders if liquidation becomes necessary. Total liabilities are adjusted to remove the amount of liabilities equal to deferred agents' balances. Agents' balances deferred and not yet due is not a liquid asset. Therefore, an adjustment is made to remove the corresponding liability. Note that bonds are included in this ratio at their annual book/adjusted carrying value, which is not necessarily equal to their fair value.

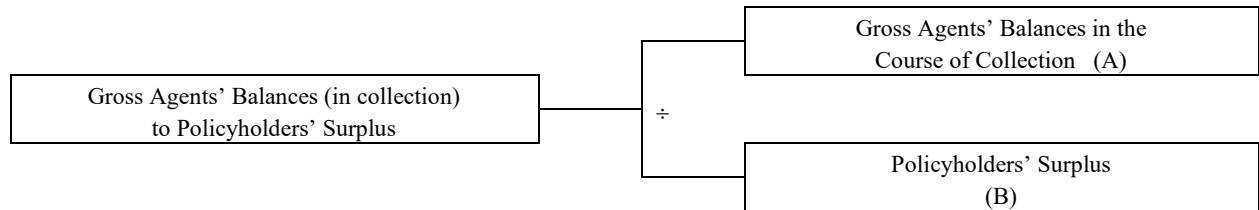
The usual range for the ratio includes results below 100 percent.

Analysis has shown that many insurers who become insolvent report increasing Adjusted Liabilities to Liquid Assets in their final years. Therefore, in interpreting the result of this ratio, it is important to consider its trend, as well as the current year result. Often, insurers maintaining large deposits with reinsured companies have unusually high ratio results. The deposits are excluded from liquid assets but the offsetting reinsurance liabilities are included in total liabilities.

Further analysis of an insurer with a high Adjusted Liabilities to Liquid Assets ratio should focus on the adequacy of reserves and on proper valuation, mix, and liquidity of assets to determine whether the insurer will be able to meet its obligations to policyholders.

Branded Risk(s): LQ

P/C LIQUIDITY RATIO 10 – GROSS AGENTS’ BALANCES (IN COLLECTION) TO POLICYHOLDERS’ SURPLUS



A. Gross Agents’ Balances in the Course of Collection Page 2, Line 15.1, Column 3 _____
 B. Policyholders’ Surplus Page 3, Line 37, Column 1 _____

Result = 100 * (A / B) _____ %

- If A is zero or negative, result is zero.
- If A is positive and B is zero or negative, result is 999.

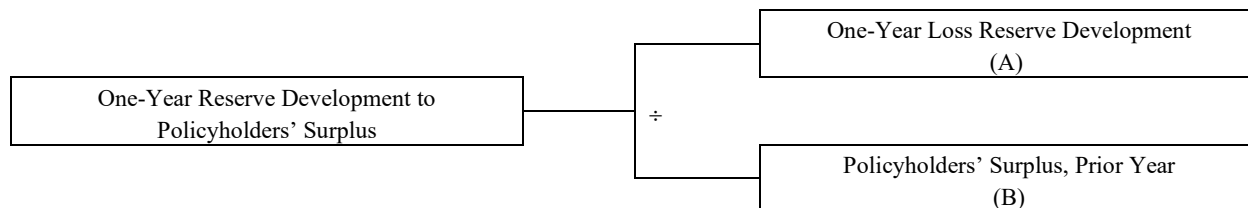
This ratio measures agents’ balances booked as written and billed to agents in relation to the insurer’s policyholders’ surplus.

The usual range for the ratio includes results less than 40 percent.

If the amount of agents’ balances is of concern, further analysis should determine whether agents’ balances that are more than 90 days old may have been included as an admitted asset. With regard to reinsurance companies, agents’ balances represent amounts due from reinsured companies that, in many cases, are subject to regulation. For reinsurers, premium amounts due may be offset against losses payable to the same insurer in the event of insolvency.

Branded Risk(s): CR

P/C RESERVE RATIO 11 – ONE-YEAR RESERVE DEVELOPMENT TO POLICYHOLDERS’ SURPLUS



A. One-Year Loss Reserve Development
 B. Policyholders’ Surplus, Prior Year

Page 34, Part 2, Line 12, Column 11 * 1000
 PY: Page 3, Line 37, Column 1

%

Result = 100 * (A / B)

- If A is positive and B is zero or negative, result is 999.

This ratio measures the development of unpaid loss and loss adjustment expenses based on loss and loss adjustment expenses reported one year prior.

The estimate of losses outstanding a year prior and up to the current statement date is the sum of the current reserves for those losses still outstanding plus the payments on those losses made during the past year. The difference between this current estimate and the reserves that were established at the end of the prior year is the one-year reserve development. If the current estimate is greater than the prior year reserves, reserves are deficient. If the current estimate is less than the prior year reserves, reserves are redundant. A positive ratio result indicates a deficiency, while a negative result indicates a redundancy.

The usual range for the ratio includes results less than 20 percent.

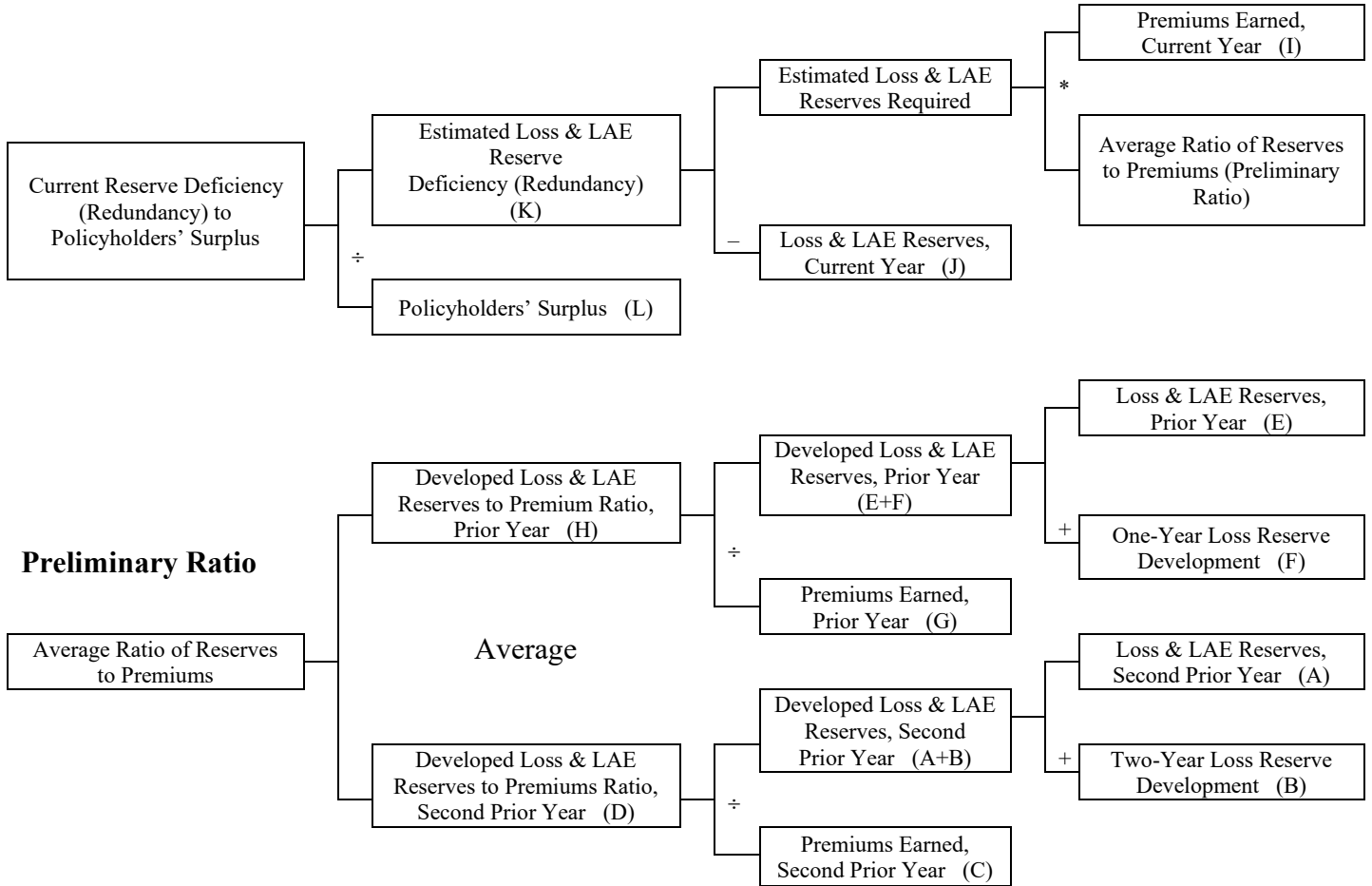
For insurers with reserves that appear to be deficient, further analysis should focus on determining which lines of business and which accident years resulted in the deficiency. The amount of deficiency for each line of business and accident year may be determined from Schedule P, Part 2.

If the insurer’s ratio results consistently show adverse development and/or Ratio 12, Two-Year Reserve Development to Policyholders’ Surplus, result is consistently worse than the One-Year Reserve Development to Policyholders’ Surplus ratio, the insurer may be intentionally understating its reserves and deficiencies are appearing as losses paid. Significant increases in this ratio might also be indicative of reserve strengthening, while significant decreases might be indicative of current reserve understatements.

An analysis of Schedule P may assist in determining the reasons for reserve deficiencies such as payments in excess of the amounts reserved. However, an on-site examination may be required to resolve any serious questions regarding the adequacy of reserves.

Branded Risk(s): RV

P/C RESERVE RATIO 13 – EST. CURR. RESERVE DEFICIENCY TO POLICYHOLDERS’ SURPLUS



- A. Loss & LAE Reserves, Second Prior Year
- B. Two-Year Loss Reserve Development
- C. Premiums Earned, Second Prior Year
- D. Developed Loss & LAE Reserves to Premiums Ratio, Second Prior Year = [(A+B) / C]
 - If C is zero, negative, or less than L/10, D = H
- E. Loss & LAE Reserves, Prior Year
- F. One-Year Loss Reserve Development
- G. Premiums Earned, Prior Year
- H. Developed Loss & LAE Reserves to Premium Ratio, Prior Year = [(E+F) / G]
- I. Premiums Earned, Current Year
- J. Loss & LAE Reserves, Current Year
- K. Estimated Loss & LAE Reserve Deficiency (Redundancy) = {[1/2 * (D+H)] * I} – J
 - If G is zero, negative, or less than L/10, K = zero
- L. Policyholders’ Surplus

2 nd PY: Page 3, Line 1 + 3, Column 1	_____
Page 34, Part 2, Line 12, Column 12 * 1000	_____
2 nd PY: Page 4, Line 1, Column 1	_____
	%

PY: Page 3, Line 1 + 3, Column 1	_____
Page 34, Part 2, Line 12, Column 11 *1000	_____
PY: Page 4, Line 1, Column 1	_____
	%

Page 4, Line 1, Column 1	_____
Page 3, Line 1 + 3, Column 1	_____

Page 3, Line 37, Column 1	_____

Result = 100 * (K / L)

- If K is positive and L is zero or negative, result is 999.
- If K and L are both zero or negative, result is zero.

_____ %

P/C RESERVE RATIO 13 – EST. CURR. RESERVE DEFICIENCY TO POLICYHOLDERS’ SURPLUS

This ratio provides an estimate on the adequacy of current reserves. This estimated deficiency is the difference between the estimated reserves required by the insurer and the actual reserves maintained.

The usual range for the ratio includes results less than 25 percent.

The results of this ratio can be distorted by significant changes in premium volume. A major increase in premiums earned can produce ratio results that indicate a deficiency greater than the actual deficiency or vice versa. However, within the normal range of variations in premiums from year to year, the distortion from changes in premiums is not significant.

Ratio results can also be affected by changes in product mix, especially if there is a change in the balance between property and liability lines of business. A significant shift in premiums from property to liability lines may cause this ratio to reflect understated reserve deficiencies. For insurers that have major shifts in product mix, the estimated current reserve deficiency or redundancy should be calculated separately for the major product groups using the approach described above for each.

Within these limitations, the ratio provides a reasonable estimate of the adequacy of reserves and can be used to determine whether an insurer has corrected reserve deficiencies that may have existed in the past.

Branded Risk(s): RV